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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,972	08/22/2003	Steve Roby	DKT03002US	1068

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BorgWarner Inc.
Patent Administrator
3850 Hamlin Road
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EXAMINER

COZART, JERMIE E

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/646,972

Applicant(s)

ROBY, STEVE

Examiner

Jermie Cozart

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-11 is/are allowed.
- 6) ☒ Claim(s) 1 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 12-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the specification at paragraph 0025], lines 11-18, a plurality of vanes (113) is described, however the remainder of the specification fails to describe whether or not the vanes are full vanes or partial vanes. Now claims 1 and 12-14 as presently disclose "a plurality of full vanes" which is not supported by the specification. In addition, Applicant's remarks filed 7/8/05, state that "Although the term "full" is not expressly recited in the specification, it is clear from a reading of the specification that there is never any suggestion for partial vanes.", which supports the fact there is no support in the specification for "full vanes". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gottemoller (5,011,371) in view of Galliger (6,019,927).

Gottemoller`371 discloses manufacturing vaned diffuser (28; col. 4, line 35) by casting a one piece disc shape portion (30; col. 4, line 36) defining one surface of the diffuser and a plurality of full diffuser vanes (31; col. 4, line 37) extending from the surface. The diffuser (28) has an axis (not labeled, figs. 2-3) which inherently allows separation of the disc shaped portion and integral full diffuser vanes (31) from a mold thereof by translation along the axis.

Gottemoller, however, does not disclose the casting step taking place in a plaster mold or the vaned diffuser consisting mainly of aluminum or an aluminum alloy.

Galliger discloses the concept of plaster molding (col. 1, lines 60-66) complex turbo-machinery parts in order to provide the part with precise dimensions and surfaces.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to cast the vaned diffuser of Gottemoller`371 in a plaster mold, in light of the teachings of Galliger, in order to form the vaned diffuser with precise dimensions and surfaces.

It would also have been obvious to one having ordinary skill in the art at the time the invention was made to cast the vaned diffuser from aluminum or an aluminum alloy thereof, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Allowable Subject Matter

5. Claims 2-11 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 2, the prior art does not teach or suggest providing a male metallic template comprising at least the upper surface of the diffuser and further comprising a central hub having an axis approximately perpendicular to the upper surface, casting a female plaster mold corresponding to the male metallic template by contacting the template with a plaster slurry within a suitable frame and permitting the slurry to harden, and filling the female plaster mold with a molten non-ferrous metal or alloy having a melting point of less than about 700 °C, in combination with the other claimed limitations.

Response to Arguments

7. Applicant's arguments with respect to claims 1 and 12-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the attached PTO-892 are cited to show that the references listed in the specification have been considered by the Examiner.
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC 
September 19, 2005


David P. Bryant
Primary Examiner